



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Washington State Energy Code Development Standard Energy Code Proposal Form

May 2018

Log No. _____

Code being amended: ☒ Commercial Provisions

Code Section # 2021 WSEC C403.2.3

Brief Description:

Move new section C403.2.3 to new added section C403.4.12 with additional exception for buildings with DDC systems.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

C403.4.12 ~~C403.2.3~~ Fault detection and diagnostics. New buildings with an HVAC system serving a gross conditioned floor area of 100,000 square feet (9290 m²) or larger shall include a fault detection and diagnostics (FDD) system to monitor the HVAC system's performance and automatically identify faults. The FDD system shall:

1. Include permanently installed sensors and devices to monitor the HVAC system's performance.
2. Sample the HVAC system's performance at least once every 15 minutes.
3. Automatically identify and report HVAC system faults.
4. Automatically notify authorized personnel of identified HVAC system faults.
5. Automatically provide prioritized recommendations for repair of identified faults based on analysis of data collected from the sampling of HVAC system performance.
6. Be capable of transmitting the prioritized fault repair recommendations to remotely located authorized personnel.

~~Exception: R-1 and R-2 occupancies~~

Exceptions:

1. R1 and R2 occupancies
2. Buildings equipped with DDC system as required C403.4.11

Purpose of code change:

The 2021 IECC does not require DDC systems, C403.2.3 was added to the IECC to provide a minimum fault diagnosis under the model code. This code change proposal is to collocate the new requirement for fault detection with DDC system requirements under section C403.4 HVAC System Controls. This would make the document more usable and to except the fault detection requirements for buildings that are required to have DDC systems with fault diagnosis and detection available as control points in programming.

Your amendment must meet one of the following criteria. Select at least one:

☒ The amendment clarifies the intent or application of the code.

☐ Addresses a specific state policy or statute.
(Note that energy conservation is a state policy)

☐ Addresses a unique character of the state.

Check the building types that would be impacted by your code change:

☒ Commercial / Retail

☒ Institutional

☒ Industrial

Your name Mike McGivern

Email address mmcgivern@kirklandwa.gov

Your organization City of Kirkland

Phone number (425) 587-3616

Other contact name [Click here to enter text.](#)

Instructions: Send this form as an email attachment, along with any other documentation available, to:
sbcc@des.wa.gov. For further information, call the State Building Code Council at 360-407-9278.

Economic Impact Data Sheet

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants and businesses.

WSEC Commercial Provisions becomes more user friendly, no added costs or savings to owners, tenants, or businesses.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$NA /square foot (For residential projects, also provide \$N/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

NA

Provide your best estimate of the annual energy savings (or additional energy use) for your code change proposal?

NA KWH/ square foot (or) NA KBTU/ square foot

(For residential projects, also provide NA KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

NA

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

No additional enforcement or plan review in addition to the new requirements of C403.2.3 added fault detection.

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.